

Application No. 10/531,141

REMARKS

Favorable reconsideration and allowance of the subject application are respectfully requested. Claims 2-8, 13-17, 24-35 and 37-40 are pending in the present application, with claims 16, 17 and 32 being independent.

Drawings

The Examiner objected to the drawings, stating that they did not show the features of claim 37. In response claim 37 has been cancelled.

Claim Objection

The Examiner objected to claim 32 at lines 14-14 however Applicants submit that "said die height" has an antecedent basis at line 6 of claim 32 (a die height).

Claim Rejections under 35 U.S.C. §103

The Examiner rejected claims 2-7, 13, 14, 16, 17, 24, 25, 28 and 31-38 under 35 U.S.C. §103, as being unpatentable over Prichard et al (US 5,479,050) in view of Kwon et al (US 5,365,409) and claims 8, 15, 26, 27, 29, 30, 39 and 40 are rejected under 35 U.S.C. §103, as being unpatentable over Prichard et al (US 5,479,050) in view of Kwon et al (US 5,365,409) and further in view of Carter, Jr. et al (US 6,365,976) These rejections are respectfully traversed insofar as they pertain to the presently pending claims.

As previously indicated by Applicants in the Amendment of September 29, 2010, the reference to Prichard teaches forming bridges by stamping bridges connecting

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spaced, separate structure of the carrier. Pritchard's bridges do not meet the claim 16 or claim 17 language of "a pedestal base junction extending along a closed path on the device plane." The Examiner, in response to this argument maintains the rejection of independent claims 16 and 17 because "any path may be chosen at the pedestal base junction such that it is a closed path.

In order to even more clearly establish this feature, each of independent claims 16 and 17 now recite "wherein the entirety of a base of the pedestal is contiguous with the device plane" and that "a stamped depth of each of said pedestals does not exceed a plane formed along an upper surface of the pedestal base". The bridges 12a and 13a and the specification of Prichard clearly do not disclose the claim requirements of amendment independent claims 16 and 17 and Pritchard's disclosed structure requires, and embodies, an extreme deformation of the carrier that creates an inherently discontinuous pair of separate base "junctions". Additionally the stamping depth of the pedestal shown in figure 1 of applicants' specification is clearly less than (below) the base of the pedestal 3 whereas Pritchard illustrates in Figure 3 that the stamping depth is higher (exceeds) the height of the base of the pedestal 23.

Kwon teaches nothing of any raised structure, and therefore cannot cure the deficiency of Pritchard, as compared to the currently amended claims 16 and 17.

Therefore claims 16 and 17 are submitted as defining subject matter not shown or disclosed by the references to Prichard or Kwon even if the references are combined.

With respect to independent claim 32, the Examiner uses the secondary reference to Kwon to show the required ratio between the pedestal height and the height of the die (i.e. wherein said pedestal height is in the range between 1/5 and 1/2

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of said die height). The sole basis for the showing in Kwon is the apparent ratio in Figure 5 between the height of die 154 and the conductive traces 158 with no support other than the apparent showing of the drawings.

Although it is well known that drawings are not required to be and are not "to scale", the primary objection to this rejection is that the primary reference to Pritchard has a specific requirement and reason for the height of the pedestal. That is, Pritchard teaches that pedestals must be "at the height of or slightly higher than top 11a of the die 11," so that "[bond] wires 14 and 15 will not sag and contact the die at an undesirable location." *Id.*, at col. 2, lines 15-18. Pritchard's Summary states this in plain terms, by reciting that the bond area (i.e., the top of the pedestal) "is above the die surface." *Id.*, at col. 1, lines 37-39. Even Pritchard's broadest claim recites that the bond area (top) of the pedestal is higher than the top of the semiconductor. *Id.*, at claim 1, lines 5-7.

Thus there is a specific teaching for a height requirement and a specific improvement associated with such a height in the specification of Pritchard, and absolutely no reason one skilled in the art would change this "requirement" of Pritchard based on a "not to scale" drawing in Kwon. Thus there has clearly been no established prima facie case of obviousness and therefore applicants submit that claim 32 defines subject matter not shown or disclosed or made obvious by Pritchard and Kwon.

Additionally claim 32 similar to claims 16 and 17 recites "a stamped depth of each of said pedestals does not exceed a plane formed along an upper surface of the pedestal base". As discussed above the stamping depth of the pedestal shown in figure 1 of applicants' specification is clearly less than (below) the base of the pedestal 3 whereas Pritchard illustrates in Figure 3 that the stamping depth is higher (exceeds) the

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height of the base of the pedestal 23.

Dependent claims 2-8, 13-15, 24-31, 33-36 and 38-40 depend from and contain all the limitations of either claim 16, 17 or 32 and for at least the same reasons are also submitted as allowable.

Accordingly, withdrawal of the rejections is respectfully requested.

CONCLUSION

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Martin R. Geissler, Applicants' Attorney at 1.703.621.7140 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 50-3828 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Date: February 28, 2011

Respectfully Submitted,



Martin R. Geissler
Attorney/Agent for Applicant(s)
Reg. No. 51011

Muncy, Geissler, Olds & Lowe, PLLC
PO BOX 1364
Fairfax, VA 22038-1364
Tel. 1.703.621.7140